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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,897	04/04/2000	Jerry H. Chisnell	FTP141A US	5716
21133	7590	12/30/2003	EXAMINER	
VAN OPHEM & VANOPHEM, PC 51543 VAN DYKE SUITE 103 SHELBY TOWNSHIP, MI 48317-4447			PATEL, VISHAL A	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/542,897

Applicant(s)

CHISNELL, JERRY H.

Examiner

Vishal Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

**The indicated allowable subject matter for claims 2-7 is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.**

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Frye (US. 4,715,624).

Frye discloses a fluid tight conduit connecting comprising:

a female component (13);

a male component (12) positioned within the female component such that the female component circumscribes the male component;

the female component includes a mounting surface and a through bore extending through the female component, the through bore having a chamfer (tapered section near 21 in contact with 14) in the mounting surface, the chamfer and the through bore defining a transition surface therebetween;

one of the plurality of collar sections engaged in annular line contact against the tapered surface to secondarily seal the fluid tight conduit connection; and

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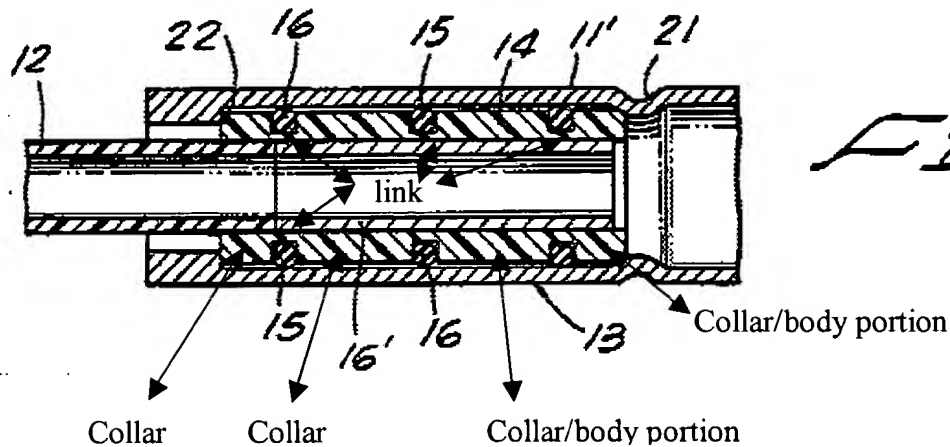
a composite sleeve seal circumscribing the male component such that the composite sleeve seal is interposed the male and female component for sealing the fluid-tight conduit connection, the composite sleeve seal comprising:

a body portion including a plurality of collar section (collar sections as shown in figure 6 below) spaced apart from one another to define at least one gap therebetween (gap between each collar),

the plurality of collar sections being interconnected by at least one link segment (link segment as shown in fig. 6 below) spanning the at least one gap;

at least one seal portion (seal portion 16) interposed the plurality of collar sections in the at least one gap and surrounding the at least one link segment to interlock the at least one seal portion with the body portion to form the composite sleeve seal as one integral component;

the plurality of collar sections are made of plastic (entire 14 is made of plastic) and the at least one seal portion is made of rubber material (o-rings are made of rubber).



***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4-6 and 9-11<sup>and 15</sup> are rejected under 35 U.S.C. 103(a) as being unpatentable over Frye in view of Thompson (US. 2,809,060).

Regarding claims 4-5 and 9-10:

Frye discloses the invention substantially as claimed above but fails to disclose that the link segment comprises at least three reinforcement members (members similar to 30 of applicants) to interconnect the plurality of collar sections together. Thompson teaches a seal to have reinforcement members that extend axially and are embedded in the seal (16 embedded in seal 15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the composite sleeve seal of

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Frye to have reinforcement members as taught by Thompson to provide strength to the sleeve member (inherent teaching of or purpose of a reinforcement member).

Frye and Thompson disclose the invention substantially as claimed above but fail to disclose three reinforcement members. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the reinforcement members in the link segment to have three reinforcement, since have one or two or three would be considered to be a matter of design choice and would be obvious to one having ordinary skills in the art.

Regarding claims 6 and 11:

Frye and Thompson disclose the invention substantially as claimed above but fail to disclose that the reinforcement members are 120 degrees apart. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the reinforcement members into three pieces and have the members to be 120 degrees a part, as a matter of design choice.

Regarding claim 15:

the link segment is the reinforcement member (meaning Thompson teaches a link segment embedded in a seal portion) and the seal portion is the portion that goes around the link segment (meaning that the link segment and the rings 16 described in paragraph 2 by Frye is the seal portion).

5. Claim 7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frye in view of Hansel et al (US. 5,879,033).

Frye discloses the invention substantially as claimed above but fails to disclose that one of the plurality of collar sections includes a tapered portion having a tapered

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surface thereon. Hansel discloses a seal having a tapered portion (4) having a tapered surface at a collar section (collar having the tapered surface 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the collar of Frye to have a tapered portion having a tapered surface thereon as taught by Hansel to provide easier insertion of the composite sleeve seal.

***Response to Arguments***

6. Applicant's arguments filed 10/7/03 have been fully considered but they are not persuasive.

Applicants' argument that Frye does not disclose "a body portion", "at least one collar", "at least one link segment", "at least one gap" and "at least one sealed portion" is not persuasive because the drawing (above figure 6) of Frye clearly shows a body at least one collar, at least one link segment, at least one gap (gaps between 12 and 13 that are sealed by 16) and at least one sealed portion. Furthermore applicant's arguments are not persuasive since all the features are clearly shown in figure 6 of Frye.

Applicants' argument that the examiner has not established a prima facie case of obviousness is not persuasive since Frye discloses all the limitations except that the reinforcement is in the link segment, to reinforce a seal by adding reinforcement segments is taught by Thompson. Furthermore examiner has set forth the differences in the claim over the reference (Frye shows all the limitations except for the limitations of claims 4-6 and 6-9), set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter (combining the teaching of Thompson to the invention of Frye, see paragraph 4) and explain why the proposed modification would be obvious (it would be obvious to provide a stronger seal, inherent teaching of a

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reinforcement member is to strengthen by additional assistance, material or support, see definition of reinforce in Merriam-Webster's Collegiate Dictionary, tenth edition, page 986).

Applicants' argument against Frye and Hansel is not persuasive because Frye shows all the limitations except that one of the plurality of collar sections includes a tapered portion having a tapered surface thereon (set forth the differences in the claim over the reference). Hansel discloses a seal having a tapered portion (4) having a tapered surface at a collar section (collar having the tapered surface 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the collar of Frye to have a tapered portion having a tapered surface thereon as taught by Hansel (set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter) to provide easier insertion of the composite sleeve seal (explain why the proposed modification would be obvious).

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the



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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (703) 309-3179.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

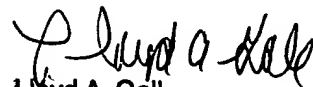
**or faxed to:** 703-872-9326, for formal communications for entry before Final action:  
or,  
703-872-9327, for formal communications for entry after Final action.

**For informal or draft communications**, please label "**PROPOSED**" or "**DRAFT**" and fax to: 703-746-3814.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP  
December 29, 2003

Anthony Knight  
Supervisory Patent Examiner  
Tech. Center 3600

  
Lloyd A. Gall  
Primary Examiner